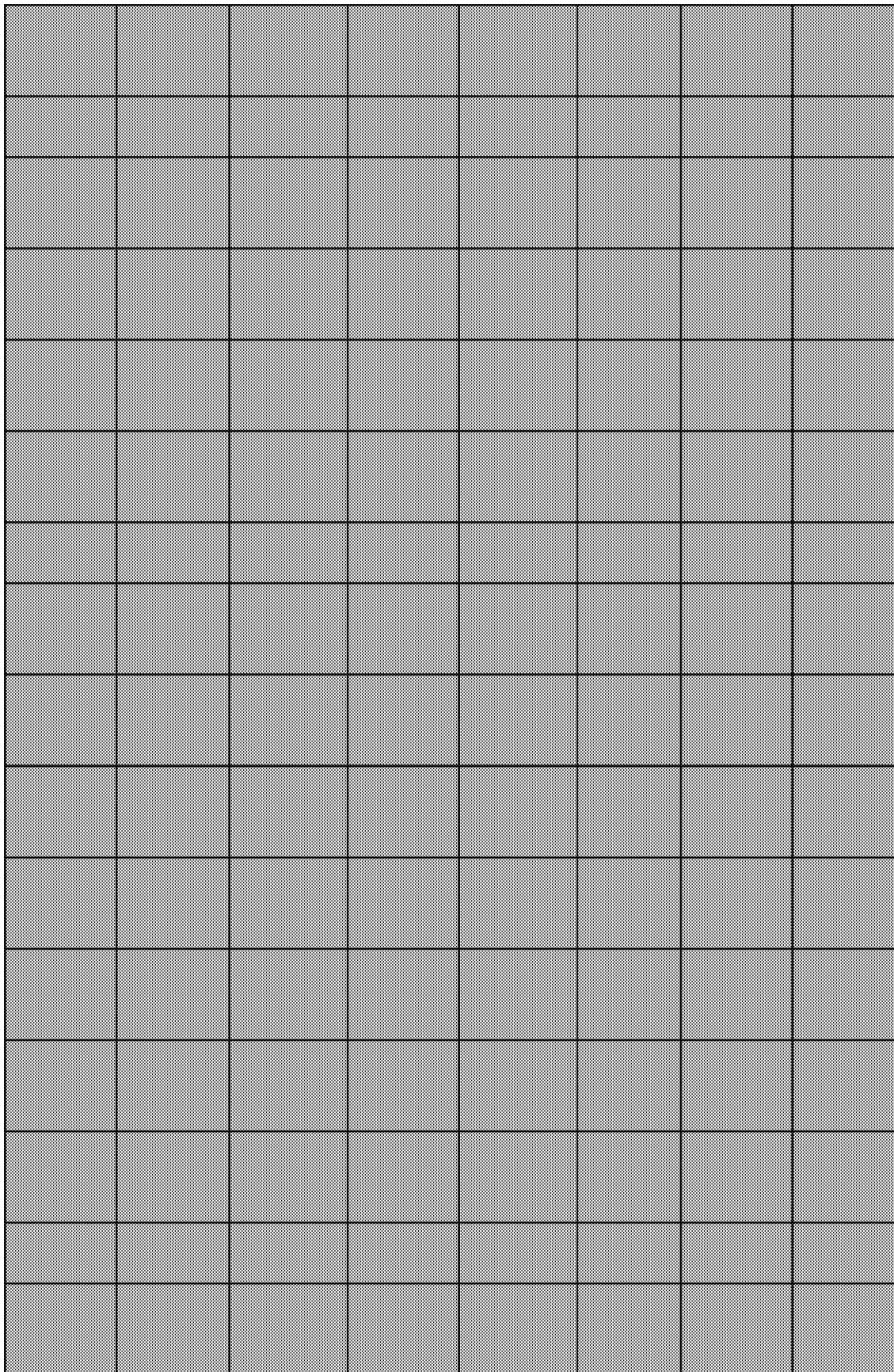


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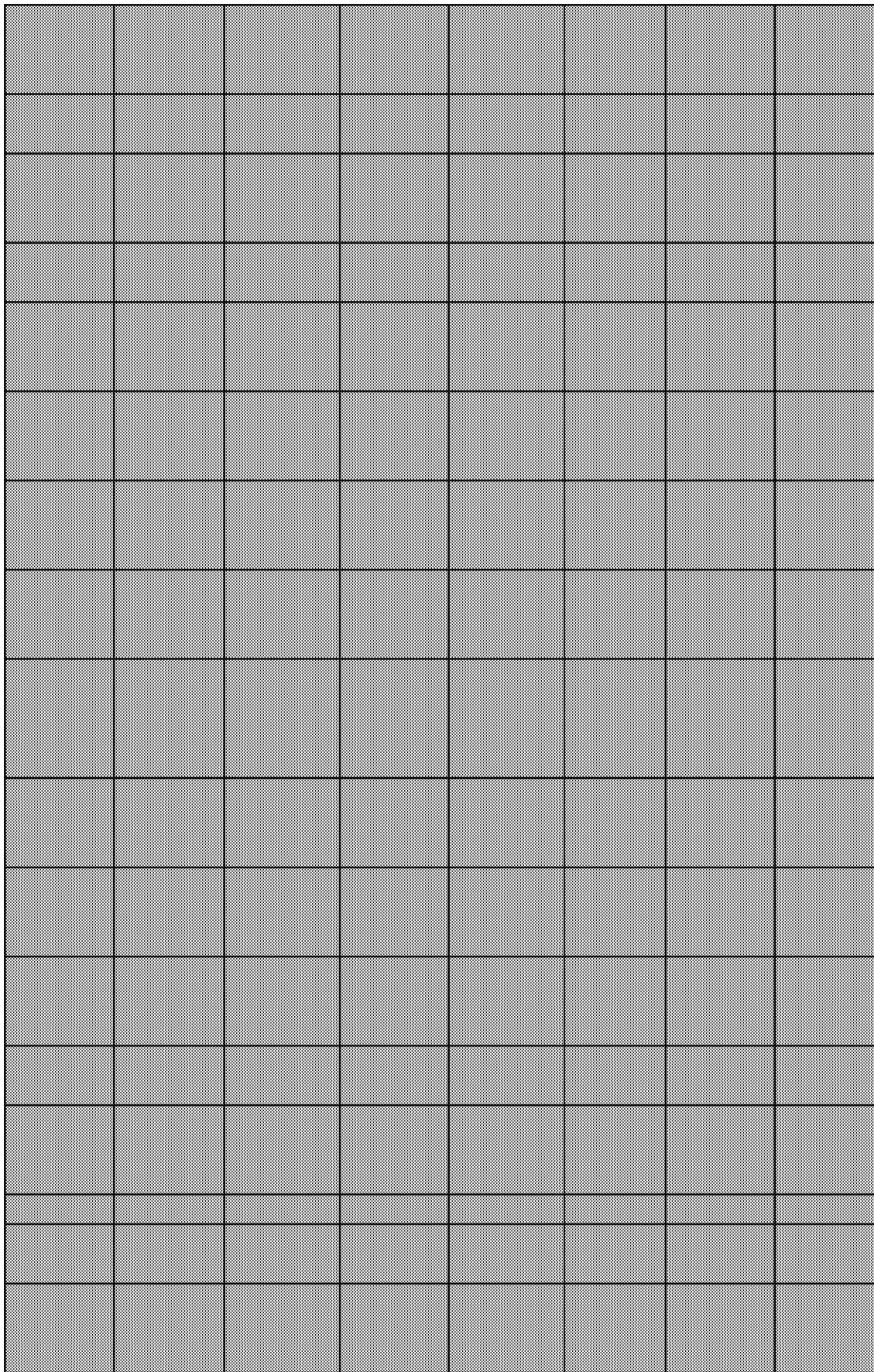
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| Escherichia coli responds to oxidative stress by activating sets of coregulated genes that help the cell to maintain homeostasis. |
| We have isolated and characterized a gene encoding cytosolic glutathione reductase from <i>Brassica campestris</i> (<i>B. campestris</i>). |
| Highly variable regions called genomic islands are found in the genomes of marine picocyanobacteria, and have been proposed to play a role in adaptation to their environment. |
| The transcription of manganese superoxide dismutase (MnSOD), expression of which is essential for detoxification of superoxide anions, is induced by Mn(II) in <i>Escherichia coli</i> . |
| A full-length cDNA sequence putatively encoding an ATP-binding cassette (ABC) transporter (GintABC1) was isolated from <i>Glomus intraradices</i> . |
| Glutaredoxins (GRXs) are small proteins with glutathione-dependent disulfide oxidoreductase activity involved in cellular redox regulation. |
| A full-length metallothionein (MT) gene (GintMT1) was isolated from <i>Glomus intraradices</i> extraradical mycelium. This is the first MT gene isolated from a symbiotic root nodule bacterium. |
| Vitamin B6 is an essential metabolite that has recently been implicated in defense against cellular oxidative stress. In fungi, it is required for the synthesis of ergothioneine, a potent antioxidant. |
| Microarray analyses were conducted to evaluate the paraquat-induced global transcriptional response of <i>Bacillus anthracis</i> . |
| The NADP(H)-dependent enzymes glucose-6-phosphate dehydrogenase (G6PDH) and ferredoxin(flavodoxin)-NADP(H) reductase (FNR) are induced by H ₂ O ₂ in <i>Escherichia coli</i> . |
| The glutathione peroxidase homologous gene (Gpxh gene) in <i>Chlamydomonas reinhardtii</i> is up-regulated under oxidative stress. |
| The effect of the glutathione reductase (GshR) activity of <i>Lactobacillus sanfranciscensis</i> DSM20451(T) on the thiol levels in <i>Escherichia coli</i> K12 MG1365. |
| SoxR is a transcription factor that governs a global defense against the oxidative stress caused by nitric oxide or excess sulfhydryl groups. |
| In the current study, we examined the expression level of glyceraldehyde-3-phosphate dehydrogenase (GAPDH) protein in <i>Escherichia coli</i> under various conditions. |
| PIP: This article describes some negative effects from modernization and urban growth in South America, including disease outbreaks and ecosystem degradation. |
| Laboratory conditions have been identified that cause the rapid death of cultures of cyanobacteria producing urease. On the other hand, the urease-producing cyanobacteria can be used as a biofertilizer. |
| Comparison of the proteomes of wild-type <i>Photorhabdus luminescens</i> and its hcaR derivative, grown in insect hemolymph. |

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MAGGY is a gypsy-like retrotransposon isolated from the plant pathogenic fungus *Magnaporthe grisea*. The ability of vari

Ascorbate peroxidases are important enzymes that detoxify hydrogen peroxide within the cytosol and chloroplasts of pla

By comparing cDNA populations derived from chromium-stressed primary leaves of barley (*Hordeum vulgare L.*) with cor

The human gastric pathogenic bacterium *Helicobacter pylori* lacks a MutSLH-like DNA mismatch repair system. Here, we

Green fluorescent protein (GFP) is a reporter that has had a significant impact due to its many advantages over other rep

A gene encoding superoxide dismutase (SOD), sodM, from *S. aureus* was cloned and characterized. The deduced amino a

Small heat-shock proteins (sHsps) are widespread molecular chaperones for which a peroxisomal localization has not yet

Small heat shock proteins (Hsps) protect against stress-inducible denaturation of substrates. Our objectives were to clone

The effects of oxidative insult on gene transcript levels in the filarial nematode *Onchocerca volvulus* were investigated us

A novel in vivo expression technology (IVET) was performed to identify *Klebsiella pneumoniae* CG43 genes that are speci

We have used the technique of inverse PCR to identify *Escherichia coli* chromosomal genes carrying Lrp-regulated inserts

KEY MESSAGE: A suppression subtractive hybridization library was constructed using inflorescence primordia of 'Nuomici

Scedosporium boydii is an opportunistic filamentous fungus which may be responsible for a large variety of infections in

Salmonella enterica serovar *Typhimurium* responds to superoxide-generating agents through soxR-mediated activation o

To better understand the defense mechanism of *Streptococcus thermophilus* against superoxide stress, molecular analys

In order to identify genes that are differentially expressed as a consequence of oxidative stress due to paraquat we used

In the present study we have analyzed protein oxidation on *Escherichia coli* when these cells were submitted to different

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